# WHAT IS CLAIMED IS:

1. A method for producing multiple imagery products from a single scan of motion picture film, said method comprising the steps of:

scanning a motion picture film and generating a digital data file that provides a full fidelity rendition of the imagery on the motion picture film, wherein full fidelity is taken to mean the substantial preservation of the spatial resolution and colorimetric profile of the motion picture film;

providing a plurality of processing files that convert the digital data file into a corresponding plurality of imagery products;

selecting a processing file for a particular imagery product; and

applying the selected processing file to the digital data file to generate the particular imagery product.

2. The method as claimed in claim 1 wherein the processing files are capable of directly converting the digital data files into a corresponding plurality of imagery products without having to rescan the motion picture film.

3. The method as claimed in claim 1 wherein the processing files contain data necessary to spatially resample and colorimetrically process the digital data file in order to generate the particular imagery product.

4. The method as claimed in claim 1 wherein the multiple imagery products include film and video products.

5. The method as claimed in claim 1 further comprising the step of storing the digital data file.

6. The method as claimed in claim 1 further comprising the step of compressing the digital data file.

7. The method as claimed in claim 6 wherein the method of compression is a lossless wavelet compression.

8.      The method as claimed in claim 1 wherein the digital data file utilizes a single file format that also contains source data for the processing files for the imagery products.

9.      The method as claimed in claim 8 wherein the source data included in the single file format includes data necessary to spatially resample and colorimetrically process the digital data file in order to generate the particular imagery product.

10.     The method as claimed in claim 1 wherein the digital data file is provided as a digital intermediate file to a separate post production facility that applies the selected processing file to the digital intermediate file to generate the particular imagery product.

11.     A method for producing multiple imagery products from a single scan of motion picture film that provides a full fidelity rendition of the imagery on the motion picture film, wherein full fidelity is taken to mean the substantial preservation of the spatial resolution and colorimetric profile of the motion picture film, said method comprising the steps of:
        accessing a selected processing file from a plurality of processing files that are capable of converting the digital data file into a plurality of imagery products; and
        applying the selected processing file to the digital data file to generate the particular imagery product.

12.     The method as claimed in claim 11 wherein the plurality of processing files are made available over a network.

13.     The method as claimed in claim 11 wherein the processing files contain data necessary to spatially resample and colorimetrically process the digital data file in order to generate the particular imagery product.

14.     The method as claimed in claim 11 wherein the multiple imagery products include film and video products.

15.     The method as claimed in claim 11 wherein the digital data file utilizes a single file format that also contains source data for the processing files for the imagery products.

16.     The method as claimed in claim 15 wherein the source data included in the single file format includes data necessary to spatially resample and colorimetrically process the digital data file in order to generate the particular imagery product.

17.     In a method for producing multiple imagery products from a single scan of motion picture film that provides a digital data file offering a full fidelity rendition of the imagery on the motion picture film, wherein full fidelity is taken to mean the substantial preservation of the spatial resolution and colorimetric profile of the motion picture film, the improvement wherein the multiple imagery products are enabled by storing a plurality of processing files that are capable of converting the digital data file into a plurality of imagery products.

18.     A system for producing multiple imagery products from a single scan of motion picture film, said system comprising:

an optical scanner for scanning a motion picture film and generating a digital data file that provides a full fidelity rendition of the imagery on the motion picture film, wherein full fidelity is taken to mean the substantial preservation of the spatial resolution and colorimetric profile of the motion picture film;

a system component providing an interface to a plurality of processing files that are capable of converting the digital data file into a corresponding plurality of imagery products; and

a processor for accessing a selected processing file for a particular imagery product and applying the selected processing file to the digital data file to generate the particular imagery product.

19. The system as claimed in claim 18 further comprising a storage device for storing the digital data file.

20. The system as claimed in claim 18 further comprising a compression processor for compressing the digital data file.

21. The system as claimed in claim 20 wherein the compression processor employs a lossless wavelet compression.

22. A file format for digital picture exchange of motion picture imagery comprising:

an image element that contains digital data providing a full fidelity rendition of the imagery on the motion picture film, wherein full fidelity is taken to mean the substantial preservation of the spatial resolution and colorimetric profile of the motion picture film; and

a processing element that contains processing data that is capable of converting the digital data into a corresponding plurality of imagery products.

23. The file format as claimed in claim 22 wherein the digital data is compressed and the image element includes a field identifying the compression algorithm.
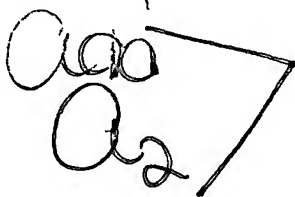
24. The file format as claimed in claim 23 wherein the compression algorithm is JPEG-2000 lossless wavelet compression.

25. The file format as claimed in claim 22 wherein the processing element contains "pan and scan" extraction data.

26.     The file format as claimed in claim 22 wherein the processing element includes data necessary to spatially resample and colorimetrically process the digital data in order to generate the particular imagery product.

27.     The file format as claimed in claim 22 implemented according to SMPTE standard 268M-1994.